

AMENDMENTS TO THE CLAIMS

1. (Currently amended) In a code division multiple access mobile radio channel communications network, a method of providing pilot symbols comprises: providing a first set of pilot symbols through a plurality of dedicated pilot channels, each [such] dedicated pilot channel being dedicated to one mobile user; simultaneously providing a second set of pilot symbols through at least one common control channel, said common control channel also carrying data symbols in addition to said second set of pilot symbols; and in a mobile combining the first and second sets of pilot symbols and from said combination estimating the channel impulse response.
2. (Currently amended) A method according to claim 1 in which the common control channel is one of a broadcast channel or a forward access channel or a paging channel.
3. (Currently amended) A method according to claim 2 in which, where more than one common control channel carries pilot symbols, the pilot symbols from each of said more than one common channel [all common

channels] are combined with the first set of pilot symbols.

4. Canceled.
5. (Previously amended) A method according to claim 1 comprising transmitting from a mobile to a network base station information relating to quality of received pilot symbols, the base station then varying the energy associated with the first set of pilot symbols supplied to that mobile.
6. (Currently amended) A method according to claim 5 further comprising the step of varying [the] time offsets between pilot symbols on [the radio frames in] the dedicated pilot channel and [the] pilot symbols on the at least one common channel.
7. (Original) A code division multiple access mobile radio telecommunications network comprising a plurality of mobiles each having a dedicated pilot channel; a plurality of base stations; first pilot symbol generation means arranged to supply pilot symbols to the dedicated pilot channels; second pilot symbol generation means arranged to supply to at least one common control channel dedicated pilot symbols embedded between data symbols broadcast by the common

control channel; and in each mobile, receiving means arranged to receive pilot symbols in the dedicated pilot channel and the common control channel, combining means to combine the received pilot symbols, channel estimation means to receive the combined pilot symbols, and coherent detection means arranged to vary at least one property of the mobile in accordance with the output of the channel estimation means.

8. (Original) A network according to claim 7 in which each mobile is arranged to send to an associated base station information relating to the quality of pilot symbols received on its dedicated pilot channel, and each base station is arranged to vary the energy of said pilot symbols accordingly.

9. (Currently amended) A network according to claim 8 in which each mobile is further arranged to send to an associated base station information relating to the quality of pilot symbols received on the at least one common channel, and each base station is arranged to vary the [time-offsets between radio frames of the dedicated traffic channel accordingly] timing of the pilot symbols in the common control channel with respect to the pilot symbols in the dedicated pilot channel.

10. (Currently amended) A mobile for use in a code division multiple access radio telecommunications network comprising first receiving means to receive pilot symbols on a dedicated pilot channel; second receiving means to receive pilot symbols on at least one common control channel carrying pilot symbols embedded between data symbols; combining means to combine said pilot symbols; and channel estimation means connected to the combining means to provide an output to coherent detection means.
11. (Currently amended) A mobile according to claim 10 further comprising a set of rake fingers arranged to receive the [combined] pilot symbols from the dedicated pilot channel and said at least one common control channel.
12. (Currently amended) A method according to claim 1 in which, where more than one common control channel carries pilot symbols, the pilot symbols from each of said more than one common channel [all common channels] are combined with the first set of pilot symbols.
13. Canceled.

14. (Previously Presented) A method according to claim 2 comprising transmitting from a mobile to a network base station information relating to quality of received pilot symbols, the base station then varying the energy associated with the first set of pilot symbols supplied to that mobile.
15. (Currently amended) A method according to claim 14 further comprising the step of varying the time offsets between pilot symbols on [the radio frames in] the dedicated pilot channel and pilot symbols on the at least one common channel
16. (New) In a code division multiple access mobile radio channel communications network, a method of providing pilot symbols comprises: providing a first set of pilot symbols through a plurality of dedicated pilot channels, each dedicated pilot channel being dedicated to one mobile user; simultaneously providing a second set of pilot symbols through at least one common control channel, said common control channel carrying static data symbols and said static data symbols being used as said second set of pilot symbols; and in a mobile combining the first and second sets of pilot symbols and from said combination estimating the channel impulse response.

17. (New) A method according to claim 16 in which the common control channel is one of a broadcast channel or a forward access channel or a paging channel.
18. (New) A mobile for use in a code division multiple access radio telecommunications network comprising first receiving means to receive pilot symbols on a dedicated pilot channel; second receiving means to receive pilot symbols on at least one common control channel wherein said pilot symbols on said at least one common control channel are static data symbols; combining means to combine said pilot symbols; and channel estimation means connected to the combining means to provide an output to coherent detection means.
19. (New) A method according to claim 18 in which at least one common control channel is one of a broadcast channel or a forward access channel or a paging channel.